

Work Order ID 65004

Wednesday, January 05, 2011 1:25:57 PM



Page 1

Item ID: D3220-3

Accept



Setup Start



Revision ID:

Item Name: Doubler

Stop



Start Date: 1/5/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 1/14/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan:

*PL*Date: 1-01-5

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr	Revision Nbr
D3220	B

100



FLOW WATER JET

Waterjet

Memo

0.00

IB11-1-6

FLOW CNC Waterjet

2624 .050

1-Cut as per Dwg D3220

Dwg Rev: RProg Rev: B

2-Deburr if necessary

(C)

110



QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Memo

0.00

IB11-1-6

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

120



QC

Quality Control

Operation
Description

QC8- Inspect parts - second check

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

8 1/01/06

X6

130



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

27/01/101

X6

X

140



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

R/1/01/05 C6

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Page 3

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Stop



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Cust Item ID:

Required Date: 1/14/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

150



Packaging

Packaging

Operation
DescriptionIdentify as per dwg & Stock Location: 180ASet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

160



QC

Quality Control

Memo

0.00

QC21- Final Inspection - Work Order Release

0.00

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NOTE: Date & initial all entries

Picklist Print

Wednesday, January 05, 2011 1:26:01 PM

Page 1

Work Order ID: 65004



Parent Item: D3220-3



Parent Item Name: Doubler

Start Date: 1/5/2011

Required Date: 1/14/2011

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev: A New Issue 05-11-06 JLM

IPP: B 06.11.15 waterjet EC

IPP C: 08.11.26 Comment added to step 2 KJ Verified by: eC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.050 2024-T3 .050 sheet		Purchased		No		100	sf	81.3847	0.5937	2.499789		1B 11-1-6	

Location	Loc Qty	Loc Code
MAT22	81.3847	
111381	11.89	
113189	0.3947	
114968	69.1	114968

(6)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	<i>15004</i>
Description: Doubler	Part Number:	D3220-3
Inspection Dwg: D3220	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Measured by: <u>JB</u>	Audited by: <u>J</u>	Prototype Approval: N/A
Date: 11-1-06	Date: 11/01/06	Date: N/A

Rev	Date	Change	Revised by	Approved
A	04.02.27	New Issue P/O D412-698-013	KJ/RF	
B	10.02.02	Dwg Rev updated	KJ	

W/O:		WORK ORDER CHANGES					
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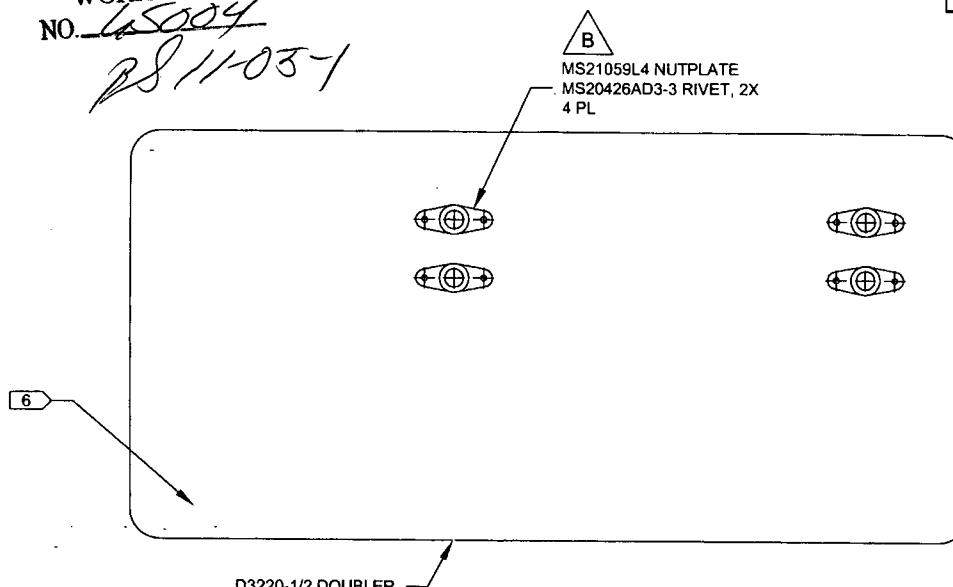
NOTE: Date & initial all entries

SHOP COPY

RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

WORK ORDER
NO. 15004
28/11/0

Item	Qty -041	Qty -042	Part Number	Description
1	X		D3220-041	DOUBLER ASSEMBLY
2		X	D3220-042	DOUBLER ASSEMBLY
3	1		D3220-1	DOUBLER
4		1	D3220-2	DOUBLER
5	4	4	MS21059L4	NUTPLATE
6	8	8	MS20426AD3-3	RIVET



RELEASED
2009-09-09
[Signature]

D3220-041 DOUBLER ASSEMBLY (SHOWN WITH D3220-1 DOUBLER)
D3220-042 (OPPOSITE)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3220-04X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: D3220-041 = 0.53 lbs
D3220-042 = 0.53 lbs

B	DRAWING UPDATED TO CURRENT STANDARDS. 00.316 WAS 00.323 (ZN C8-2, B4-3); MS20426AD3-3 WAS MS20426AD3-4 (ZN D4-1); CORRECT TYPO NOTE 1 (ZN A6-2, AB-3); REF PAR 09-025		RF	09.07.08
A	NEW ISSUE		CP	03.10.16
REV.	DESCRIPTION		BY	DATE
DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	RF			
CHECKED	<i>IP</i>	DRAWING NO.	REV. B	
MFG. APPR.	<i>BB</i>	D3220	SHEET 1 OF 4	
APPROVED	<i>IP</i>	TITLE	SCALE	
DE APPR.	<i>BB</i>	DOUBLER	NTS	
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D

D

$\varnothing 0.098$
CSK $\varnothing 0.180 \times 100^\circ$
NEAR SIDE, 8 PL

$\varnothing 0.316$
TYP, 4 PL

14.25

7.000

5.50

1.50

1.00

7.00

GRAIN
DIRECTION

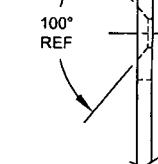
0.500 TYP

1.000 TYP

R0.50
TYP0.050
REF

DETAIL A D2-2
SCALE 5X

B1-2
SEE DETAIL A
TYP

w/o G5004
D3220-1 DOUBLER

RELEASED
2009-09-09
MD

A

A

NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.050 THICK
REF DART SPEC. M2024T3S.050
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3220-1" USING REMOVABLE TAG
- 7) WEIGHT: 0.50 lbs

8 7 6 5 4 3 2 1

DESIGN	DS	DART AEROSPACE LTD
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>SP</i>	DRAWING NO. D3220 REV. B
MFG. APPR.	<i>SP</i>	SHEET 2 OF 4
APPROVED	<i>SP</i>	TITLE DOUBLER SCALE
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

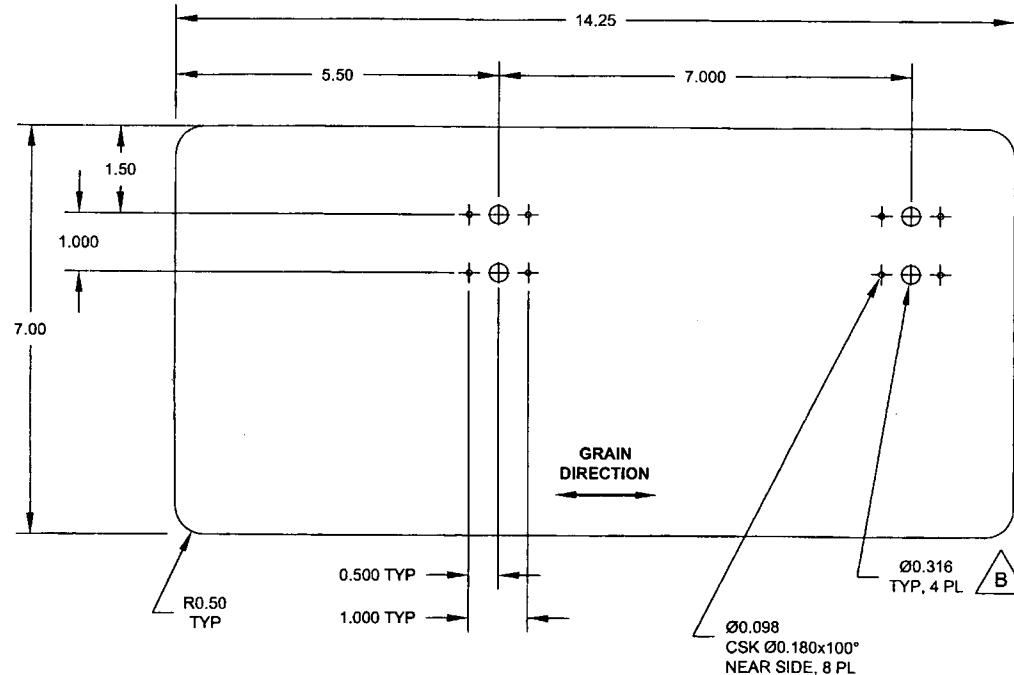
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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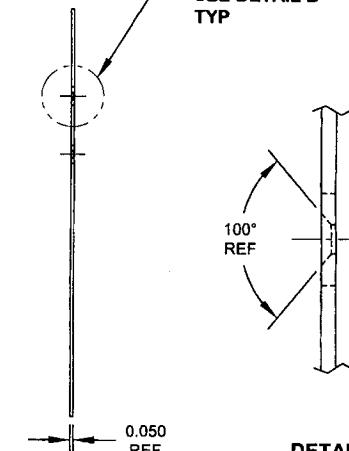
NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D



W/0 45004

B1-3
SEE DETAIL B
TYPDETAIL B
SCALE 5XRELEASED
2009-09-09
M

A



NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.050 THICK
REF DART SPEC. M2024T3S.050
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3220-2" USING REMOVABLE TAG
- 7) WEIGHT: 0.50 lbs

8 7 6 5 4 3 2 1

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D3220	SHEET 3 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	DOUBLER	NTS
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8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
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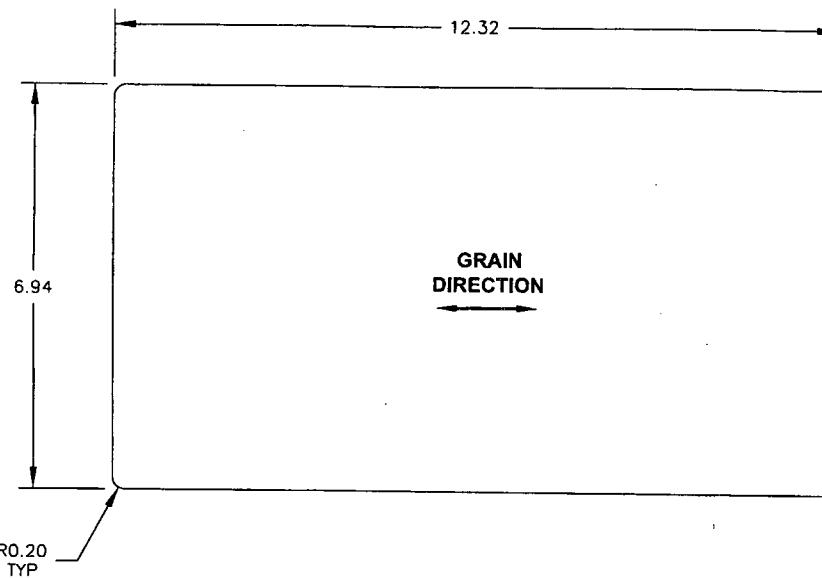
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8 1 7 6 5 4 3 2 1

w/o 65009



D3220-3 DOUBLER

RELEASED
2009-09-09
MM

NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.050 THICK
REF DART SPEC. M2024T3S.050
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3220-3" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.43 lbs

8 1 7 6 5 4 3 2 1

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MM	DRAWING NO.	REV. B
MFG. APPR.	MM	D3220	SHEET 4 OF 4
APPROVED	MM	TITLE	SCALE
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